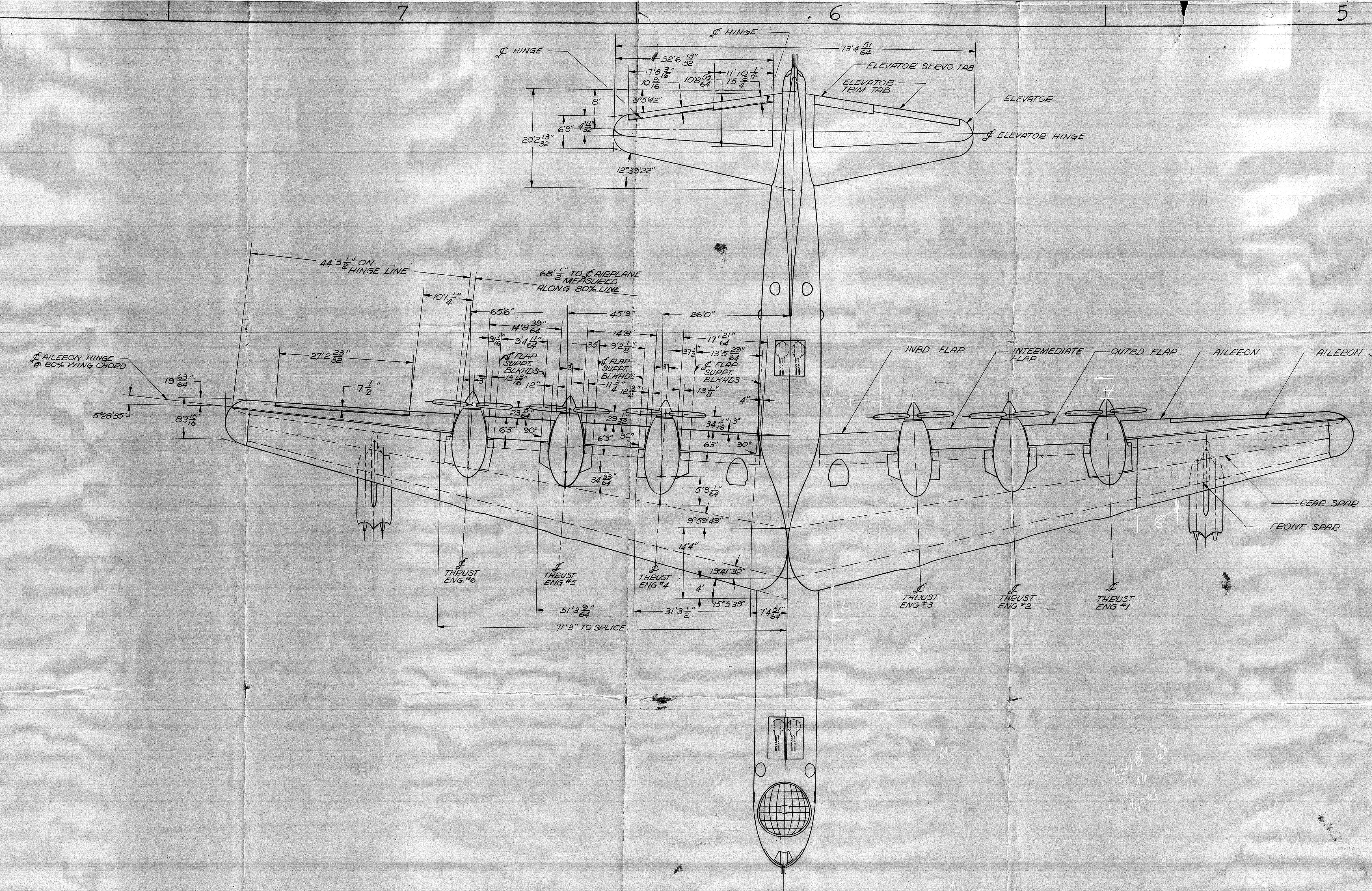
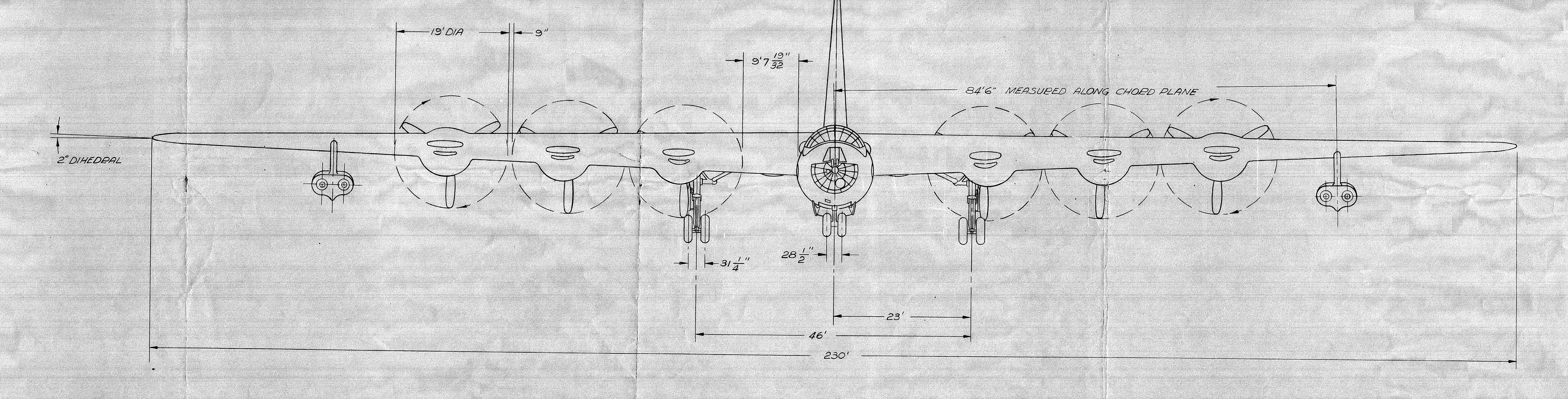


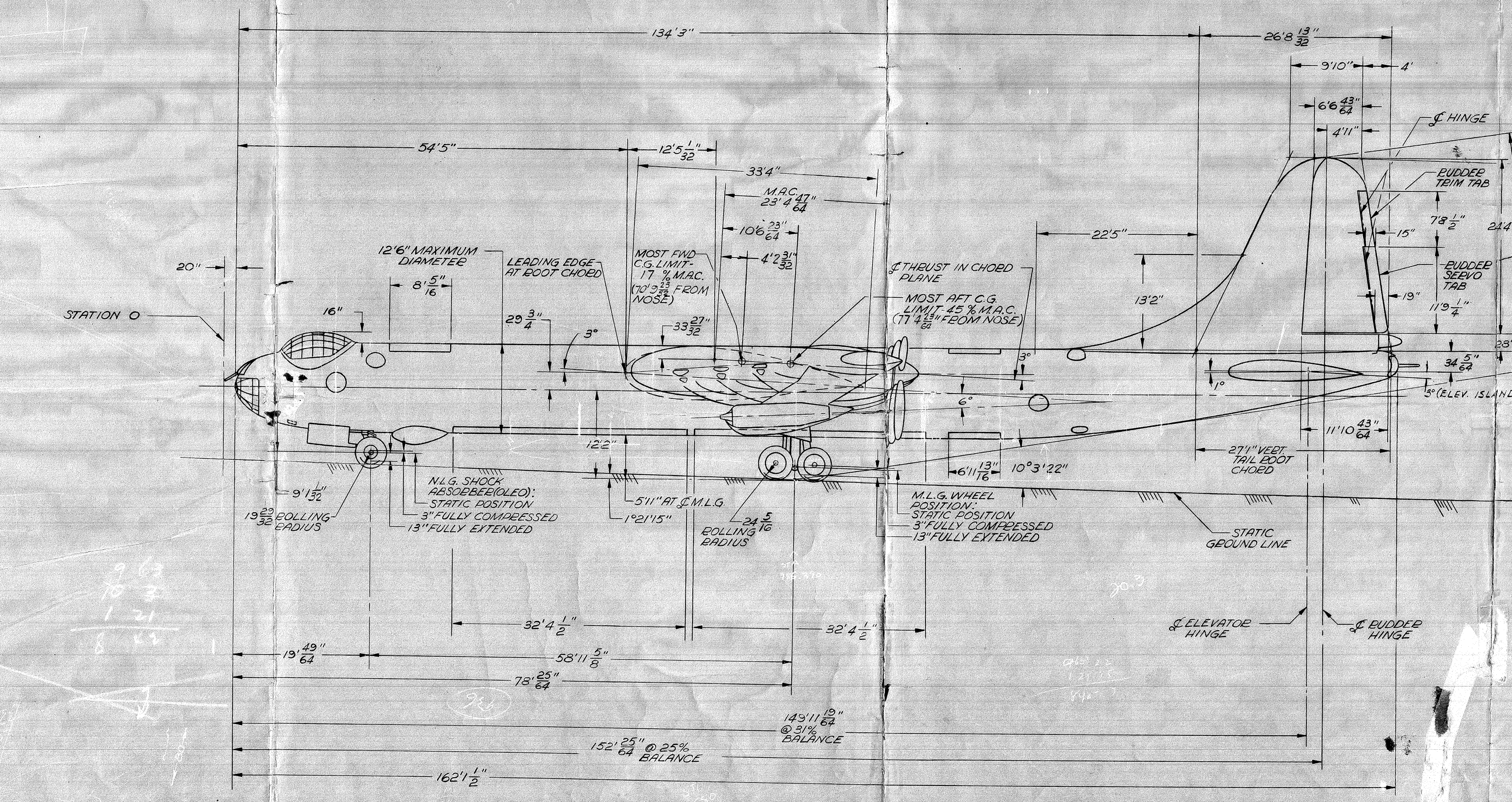


CENTER OF GRAVITY LOCATIONS

THE GROSS WEIGHT & C.G. LOCATIONS LISTED BELOW ARE BASED ON CV.AC SPEC FZD-36-006-A (DATED 6-3-49)

▲ NOSE OF AIRPLANE IS LOCATED 20" AFT OF STA. 0

CONDITION	GROSS WEIGHT (LBS)	▲STA 0 TO C.G. (FT.)	DECK TO C.G. (FT.)	HORIZONTAL C.G. (% MAC)	VERTICAL C.G. % MAC BELOW MAC
1. DESIGN GROSS WEIGHT WITH 10,000 LBS OF BOMBS IN BAY Nº 1 WHEELS & FLAPS RETRACTED.	357,500	72.85	3.99	18.6	5.0
2. DESIGN GROSS WEIGHT WHEELS & FLAPS EXTENDED.	357,500	73.12	4.37	19.7	6.6
3. MOST FWD C.G. LIKELY TO BE ATTAINED IN FLIGHT. ALTERNATE GROSS WEIGHT WITH (2) 43,000 LB. BOMBS. WHEELS & FLAPS RETRACTED.	284,927	72.38	5.83	16.6	12.9
4. MOST AFT C.G. LIKELY TO BE ATTAINED IN FLIGHT. DESIGN GROSS WEIGHT WITH 10,000 LB BOMB CONDITION (NO BOMBS) & 1000 GALS FUEL IN OUTBD. TANKS & 25% OF TAKE OFF OIL REMAINING. WHEELS & FLAPS RETRACTED.	176,913	77.0	4.52	36.3	7.3



• D A T A •

TAIL SURFACES

VERTICAL:

RUDDER BALANCE = 25% OF TOTAL AREA (LOCATED FWD OF HINGE LINE)	
RUDDER AREA AFT OF HINGE (INCL TABS)	163.0 SQ. FT.
RUDDER TRIM TAB AREA (AFT OF HINGE)	9.65 SQ. FT.
RUDDER SERVO TAB AREA (AFT OF HINGE)	18.4 SQ. FT.
RUDDER AREA TOTAL (INCL TABS)	217.3 SQ. FT.
(RUDDER SERVO TAB CHORD AFT OF HINGE = 19.00" CONSTANT)	
(RUDDER TRIM TAB CHORD AFT OF HINGE = 15.00" CONSTANT)	
DORSAL FIN AREA	60.2 SQ. FT.
VERTICAL FIN AREA (LESS DORSAL)	265.0 SQ. FT.
TOTAL VERTICAL SURFACE AREA	542.5 SQ. FT.

VERTICAL TAIL SURFACE DEFLECTION

RUDDER SERVO TAB	14° L & R
RUDDER TRIM TAB	20° L & R
RUDDER	16° L & R

VERTICAL TAIL SURFACES AIRFOIL

ROOT	N.A.C.A. 0015
TIP	N.A.C.A. 0012

HORIZONTAL

ELEVATOR BALANCE = 31% OF TOTAL AREA (LOCATED FWD. OF HINGE LINE)	
ELEVATOR AREA AFT OF HINGE LINE (INCL TABS)	326.2 SQ. FT.
ELEVATOR TRIM TAB AREA (AFT OF HINGE)	31.06 SQ. FT.
ELEVATOR SERVO TAB AREA (AFT OF HINGE)	31.98 SQ. FT.
ELEVATOR AREA TOTAL (INCL TABS)	472.9 SQ. FT.
ELEVATOR SERVO TAB CHORD (AFT OF HINGE) = 15.75" CONSTANT.	
ELEVATOR TRIM TAB CHORD (AFT OF HINGE) = 10.56" CONSTANT.	
HORIZONTAL STABILIZER AREA (INCL AREA BETWEEN STABILIZER SPARS BLANKETED BY FUSELAGE)	505.9 SQ. FT.
TOTAL HORIZONTAL SURFACE AREA (INCL AREA BETWEEN STABILIZER SPARS BLANKETED BY FUSELAGE)	978.8 SQ. FT.

HORIZONTAL TAIL SURFACES DEFLECTION

ELEVATOR TRIM TAB	24° UP 12° DOWN
ELEVATOR SERVO TAB	20° UP 20° DOWN
ELEVATOR TRAILING EDGE	25° UP 20° DOWN

HORIZONTAL TAIL SURFACE AIRFOIL

ROOT	N.A.C.A. 0015
TIP	N.A.C.A. 0015

HORIZONTAL STABILIZER ANGLE OF INCIDENCE = -1° (WITH ℄ AIRPLANE)

W I N G

AILERON BALANCE = 35% OF TOTAL AREA (LOCATED FWD. OF HINGE LINE.)	
AILERON AREA AFT OF HINGE (INCL TAB)	247.8 SQ. FT.
AILERON SERVO & TRIM TAB AREA (AFT OF HINGE)	34.4 SQ. FT.
AILERON AREA TOTAL (INCL TAB)	381.6 SQ. FT.
(AILERON SERVO-TRIM TAB CHORD AFT OF HINGE = 7.5" CONSTANT.)	
INBD. FLAP AREA	197.0 SQ. FT.
INTERMEDIATE FLAP AREA	160.3 SQ. FT.
OUTBD. FLAP AREA	160.4 SQ. FT.
TOTAL FLAP AREA	517.7 SQ. FT.
TOTAL WING AREA	4772.0 SQ. FT.

WING SURFACES DEFLECTION

AILERON SERVO TAB	25° UP	25° DOWN.
AILERON	20° UP	20° DOWN.
INBD FLAP		30° DOWN.
INTERMEDIATE FLAP		30° DOWN
OUTBD FLAP		30° DOWN

WING AIRFOIL

ROOT - NACA 63,4-4.22-A, a = 1.0 (MODIFIED)
TIP - NACA 63,4-5.17-A, a = 1.0 (MODIFIED)
TAPER RATIO = 4
ASPECT RATIO = 11.08
INCIDENCE = 3° (WITH ℄ AIPLANE)

L A N D I N G   G E A R

NOSE LANDING GEAR TIRES: 1700-20 TYPE III (LOW PRESSURE) 48.75" DIA (50.21" DIA EXPANDED.)
MAIN LANDING GEAR TIRES: 56 x 16 TYPE VII (EXTRA HIGH PRESSURE) 56" DIA (58.047" DIA EXP)
℄ MAIN LANDING GEAR NORMAL POSITION = 47.48 % M.A.C.

P O W E R   P L A N T

SIX - PRATT & WHITNEY Nº R-4360-41 RECIPROCATING ENGINES.
FOUR - GENERAL ELECTRIC Nº J47-GE-11 TURBO-JET ENGINES.

2. ALL SURFACE AREAS GIVEN IN DATA NOTES REPRESENT TOTAL AREAS PER AIRPLANE.
1. ALL WING DIMENSIONS MEASURED IN CHORD PLANE.

N O T E S

B.H. Widmer	AERODYNAMICS	9/26/49
Stanley	FURNISHINGS	9/26/49
Stanley	CONTROL PL.	9/26/49
Ray	WEIGHTS	9/26/49
Stevenson	ARMAMENT	9/6/49
Cunnutt	ELECTRICAL	9/7/49
W. H. Crow	ELECTRONICS	9/7/49
Eldred	LANDING GR.	9/7/49
Suggs	POWER PLANT	9/7/49
Mathis	CONTR. SURF.	9/6/49
Wehmann	WING	9/7/49
Dietz	FUSELAGE	9/7/49

PART NO.	RH / LH DASH NO.	PART NAME	STOCK SIZE	MATERIAL	SPECS.	ZONE

FINISHED	③✓ SMOOTH MACHINE ⑤✓ FILE OR GRIND	DATA	Dodson 8.17.49		
		STRESS		ARMY	
		CHECK		NAVY	
		GR. LDR.	Stanley	ENG. APP.	Brown
PROCESS SPECS.	LIMIT ON DIMENSIONS UNLESS OTHERWISE SPECIFIED.	DRAFTS	M. Hughey 8/22/49	WEIGHTS	

CONSOLIDATED VULTEE AIRCRAFT CORPORATION, FORT WORTH, TEX.

SCALE 1" = 96"

REPLACES

REPLACED BY

DWG.

B-36D GENERAL

ASSEM. NO. | NO. REQ. | NEXT ASSEMBLY | APL'S EFF. | MODEL | CALC. | ACT